Atty's Docket: (New) 101131-3

REMARKS

Claims 1, 3, 4, 12-13 and 21 were pending in the application and are canceled.
New claims 22-26 have been added.
These claims are fully supported by the specification and do not add new matter.

The canceled claims have been rejected under various statutory provisions. In the event that the Examiner seeks to reassert these rejections, each rejection will be addressed in the order presented in the office action.

OBJECTIONS TO THE SPECIFICATION AND CLAIMS

Sequence Compliance – Applicants respectfully request that Examiner hold the requirement to comply with 37 CFR §§ 1.821-1.825 in abeyance until notification of allowable subject matter is received.

Drawings – Applicants submit herewith, a copy of the drawings with German text. The Applicants request that Examiner continue with the examination until the drawings' text is translated and new drawings prepared.

Title; Abstract - These have been amended in accordance with Examiner's guidelines, except that the word "HUMAN" is not in the title. Applicants respectfully suggest that, in view of their disclosure of the mouse cDNA, it should not be required to limit the title to human receptors.

REJECTIONS UNDER 35 USC

§101 – Non-statutory Subject Matter

Claims 1 and 21 have been canceled.

§ 101 – Alleged Lack of Utility

Examiner had rejected the previous claims because the specification allegedly does not assert a credible, specific or substantial utility. Needless to say, Applicants vigorously disagree.

Credible Utility

The PTO's UTILITY EXAMINATION GUIDELINES OF January 7, 2003 indicate that doubting a utility's credibility is proper only "if there is any reason to question the truth of the statement of the utility." Further, unless the logic or facts are "seriously flawed," the credibility is considered credible. See Guidelines, § IV.D.

In addition, examiners are required to assess the utility from the specification and the claims. MPEP § 2107, II.

In accordance with these guidelines, the claims cannot reasonably be viewed as not having a credible utility. The EDG6 receptor and its encoding DNA have been localized to various cells and tissues involved in immunity. See page 2, last ¶; page 4, 2nd ¶. One with ordinary skill would clearly appreciate the use of these probes for monitoring the local accumulation and/or proliferation of cells of the immune system.

Accordingly, the claimed invention has a credible and well established utility as required.

Specific and Substantial Utility

A specific utility requires that the claimed subject matter have a specific usefulness with "real world value." Guidelines, page 10. Determining the activity and infiltration of immune cells is relevant to several real world conditions, *inter alia*, inflammation, leukemias, etc. This is based on the specific distribution of EDG6 receptors.

The claimed methods are clearly useful, and are immediately available to benefit the public. Accordingly, the amended claims, *indisputably*, have a specific utility.

On pages 7 and 8 of the specification, Examiner has simply listed any possible utility and merely dismissed them out of hand. The Guidelines indicated that "an assay which measures the presence of a material which has a stated correlation to a particular disease or condition" qualify as having a specific utility.

In the office action, on page 7, item 3), Examiner completely disregards this procedural rule. Further, the Guidelines specifically cite screening assays as having "a clear, specific and unquestionable utility." Guidelines, page 10, under § A.

Examiner has improperly tried to obscure the utility by creating roadblocks in the form of various parameters needed to practice the invention. The specific experimentation Examiner requires, even if necessary, is trivial and well within the capabilities of persons with ordinary skill. It is suggested that Examiner is attempting to couch the invention as being merely a research tool, or of probes for which there is not known any specific medical conditions.

Applicants respectfully request that the rejection for lack of utility be withdrawn, as the claimed subject matter has credible, specific and substantial utility as required. MPEP §2107.01.

REJECTIONS UNDER 35 U.S.C. 112, 1st Paragraph

Written Description/Utility

In view of the foregoing discussion that Applicants believe traverse the utility rejection, Applicants respectfully request that the rejection for alleged lack of support in the specification be withdrawn.

Enablement

The methodology of new independent claims 22 and 24 are clearly enabled. However, in view of the regrettable oversight of omitting the figures when filing, this may not have been easy to ascertain. The drawings submitted herewith, although in German, should better illustrate and thus, clarify the extent to which the specification's guidance enables the claims.

The specification provides a great deal of guidance as to making and using the claimed DNAs, vectors, etc, as well as practicing the new methods claims.

In accordance, it is believed that this rejection may be withdrawn.

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Written Description

Claim 3 has been amended to better describe the cDNA encompassed by the claim.

Claim 13 is believed to be adequately described. First, the sequence described by the mouse receptor of SEQ ID NO: 4, is 82% identical to the human/wild type protein. Thus, SEQ ID NO: 4 can be thought of as an actual mutant/variant of the human receptor.

Thus, the comparison of these two proteins would provide a great deal of information about the proteins' structure-function relationships.

Accordingly, withdrawal of the rejection is requested.

§ 112, 2nd ¶

Applicants request reconsideration of this rejection based on EDG6 being indefinite. The claim must be reasonably clear to those of ordinary skill. The EDG6 receptor is a member of a very well known family of ED receptors. Thus, together with the specific sequence set out in SEQ ID NOS: 1 and 2, it is submitted that independent claims are not indefinite.

Claim 4 has been amended to remove the offending terminology.

It is also respectfully suggested that claim 12 is not indefinite in view of the specificity by which the various nucleic acid probes are disclosed.

ANTICIPATION

The previous claims have been canceled. They have been replaced by new claims 22-26, and therefore, this rejection is overcome.

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CONCLUSION

It is respectfully suggested that all issues have been properly addressed.

Allowance of the claims is respectfully requested.

Respectfully Submitted,

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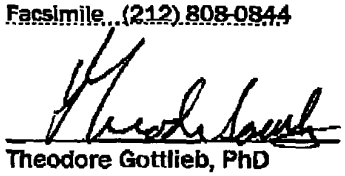

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MARKUP OF SUBSTITUTE ABSTRACT

The invention relates to G-protein coupled receptor EDG6 and its fragments, variants and mutations as well as its use. ~~Fields of application of the invention are molecular biology, pharmacy and medicine.~~

~~The invention was based on the task of isolating and identifying a further member of the EDG receptor family and making it useful for a medicinal application.~~

The new human EDG6 receptor entails 384 amino-acids ~~of Sequence 1~~ with seven transmembrane domains. The receptor possesses a potential ~~possible~~ N-terminal glycosylation site ~~point~~, three possible palmitoylation sites ~~points~~ positioned 12 to 15 amino-acids C-terminally from the seventh transmembrane domain as well as four possible C-terminal protein kinase C phosphorylation sites ~~points~~.

The invention also relates to the use of the EDG6 receptors, ~~as well as~~ its fragments, variants and mutants ~~mutations~~ and, if applicable, its binding partners for therapeutic methods and treatments.